

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Cancelled)

10. (Currently Amended) An illuminating device comprising an optical source emitting an unpolarized light beam ~~having a divergence greater than or equal to 5° on either side of the average direction of said beam,~~ a polarizing beam splitter comprising a grid polarizer included between first faces of a first and of a second transparent prism, which prisms each have a second exit face both situated within one and the same plane, said first faces and second faces of each prism being perpendicular; the unpolarized light beam penetrating into the first prism through a third face of this first prism and reaching the polarizing beam splitter that transmits the light with a first polarization direction and that reflects the light with a second polarization direction; the light transmitted by the polarizing beam splitter being transmitted to a third face of the second prism that reflects it toward said second exit face of the second prism, and the light reflected by the polarizing beam splitter being transmitted to said third face of the first prism that reflects it toward said second exit face of the first prism,

~~wherein said illuminating device also comprises a polarization rotator device associated with only one of said second exit faces of the prisms, a light integrating device, and a spatial light modulator of a liquid crystal type,~~

~~wherein said light integrating device has one entry face that is optically coupled to said second exit faces of the prisms and has one exit face, different from the entry face, that is optically coupled with the liquid crystal layer of said spatial light modulator, wherein said light integrating device, when receiving the beams reflected by the third faces of the prisms through said entry face, delivers a beam through said exit face such that illumination of said exit face is substantially homogeneous over this exit face such as to illuminate through said exit face the liquid crystal layer of said spatial light modulator in a uniform manner,~~

~~wherein the polarizing beam splitter comprises a grid polarizer situated between the first faces of the first and of the second prism, is formed on the first face of one transparent prism selected from the group including the first prism and the second prism, and~~

~~wherein said illuminating device also comprises means for focusing the light beam emitted by the optical source close to the entry face of the integrator device;~~

wherein an antireflective coating is provided on the first face of the other transparent prism, which other transparent prism lacks the grid polarizer thereon,

wherein an air gap is provided for cooling between the grid polarizer and the antireflective coating, and

wherein the divergence of said light beam is greater than or equal to 5° on either side of the average direction of said beam.

11. **(Currently Amended)** The illuminating device as claimed in claim 10, wherein the non-right angles of the prisms are substantially equal to 60° opposite the first faces and to 30° opposite the second face, and ~~in that~~ wherein the average direction of said light beam is substantially perpendicular to the third face of the first prism as it penetrates into this prism.

12. **(Cancelled)**

13. **(Currently Amended)** The illuminating device as claimed in claim 10, wherein the divergence of said light beam is less than or equal to 10° on either side of the average direction of said beam.

14 - 16. **(Cancelled).**

17. **(Previously Presented)** The illuminating device as claimed in claim 10, wherein the index of the material of the prisms is less than or equal to 1.5.

18. **(New)** The illuminating device as claimed in claim 10 comprising also a polarization rotator device associated with only one of said second exit faces of the prisms.

19. **(New)** The illuminating device as claimed in claim 18 comprising also a light integrating device, and a spatial light modulator of a liquid crystal type,

wherein said light integrating device has one entry face that is optically coupled to said second exit faces of the prisms and has one exit face, different from the entry face, that is optically coupled with the liquid crystal layer of said spatial light modulator, wherein said light integrating device, when receiving the beams reflected by the third faces of the prisms through said entry face, delivers a beam through said exit face such that illumination of said exit face is substantially homogeneous over this exit face such as to illuminate through said exit face the liquid crystal layer of said spatial light modulator in a uniform manner.